AMENDMENTS TO THE CLAIMS

- 1. (Currently Amended). A blood processing system comprising first, second, and third, and fourth storage containers,
- a first in-line filter including a fibrous filter media sized to remove leukocytes by depth filtration,
- a second in-line filter including a membrane filter media sized to remove red blood cells, platelets, and leukocytes by exclusion,
- a unit of red blood cells contained within the first storage container, the unit of red blood cells having been filtered by passage through the first in-line filter so that the unit of red blood cells is essentially free of leukocytes, the unit of red blood cells contained within the first storage container including an additive solution transferred from the fourth storage container and mixed with the unit of red blood cells prior to passage through the first in-line filter, the unit of red blood cells and the additive solution also being essentially free of residual air due to venting of residual air from the first storage container after passage of the unit of red blood cells and additive solution through the first in-line filter,
- a unit of cell-free platelet poor plasma contained within the second storage container, the unit of cell-free platelet poor plasma having been filtered by passage through the second in-line filter, so that the unit of cell-free platelet poor plasma is essentially free of red blood cells and platelets and leukocytes, the unit of cell-free platelet-poor plasma also being essentially free of residual air due to venting of residual air from the second storage container into the fourth storage container after passage of the unit of cell-free platelet-poor plasma through the second in-line filter, and
 - a unit of platelets contained within the third storage container, and residual air from the second storage container contained in the fourth storage container.

 2 19. (Canceled).